

UEMS—Section of Medical Genetics

The European Certificate in Medical Genetics and Genomics (ECMGG)

This is a brief summary of the development and delivery of the ECMGG. Significant events leading up to the introduction of the exam are outlined in the [‘History of the Section’](#) on this site.

Following the birth of the Section in 2013 and the subsequent work, from 2015, of a syllabus group led by Professor Alessandra Renieri (with Ulf Kristoffersson, Béla Melegh, Feliciano Ramos, and Peter Turnpenny), the required documentation was presented to the UEMS Council and approved in March 2017. This comprised: 1) a ‘Description of the Specialty of Medical Genetics’ produced by Professor Béla Melegh; 2) the syllabus; 3) an updated ETR (European Training Requirement). At the meeting of Section in Copenhagen, May 2017, it was announced that planning for the exam could begin, and a 24-month project was envisaged.

In June 2017 Professors Béla Melegh and Peter Turnpenny were granted access to observe the UEMS Neurology examination in Amsterdam. Useful observations were made with respect to the running of an exam consisting of multiple choice question (MCQ) papers and an Oral exam. Soon afterwards a call to SMG national delegates invited interest, commitment, and attendance at the first examination workshop. Dr Jonathan Berg (Dundee), with substantial experience in medical examining, was also invited. Eight people representing seven European nations attended the first workshop in early October 2017, hosted by Dr Ulf Kristoffersson in Lund, Sweden.

At this first two-day workshop lengthy discussions took place concerning exam structure and logistics, and it was decided to run a pilot event in Milan, 2018. A call then went out to colleagues across Europe requesting MCQs to populate the first exam papers. The exam structure was refined at the second workshop in Dundee, February 2018, with six attendees. Consultation with University of Dundee experts led to the decision to construct the exam on the basis of an MCQ paper and a six-station OSCE-style structured oral assessment (SOA). A further workshop in Heidelberg took place in April 2018 and the pilot exam was finalized. Eight candidates sat the paper and lessons were learned.

The Examination Group led by Peter Turnpenny grew to 15 individuals and over the next 12 months two further workshops took place, in Maastricht and Zaragoza, to prepare the first inaugural exam, the EDMGG, in Gothenburg – 100 MCQs and 6 SOAs. A team of 11 additional colleagues across Europe generously gave their time to standard-set the MCQ paper based on the Angoff method. Dr Bonnie Lynch (Dundee), an expert exam statistician, was recruited to analyse the standard-setting data to generate the pass mark as well as detailed psychometric statistical analysis of the results. A further group of colleagues were recruited as external examiners for the SOA component of the exam. Twenty candidates sat the inaugural exam and 15 passed. The final results were scrutinized at a convened meeting of an Examination Board, consisting of the Examination Group, external examiners, and the Section Bureau.

In October 2019 preparations for the next exam in Berlin 2020, now designated the European Certificate in Medical Genetics and Genomics (ECMGG), began with a workshop in Roskilde.

Ed Tobias and his son Adam then developed a bespoke [examination website](#) which was live from January 2020. The next workshop in Perthshire, early March 2020, met under the growing threat of Covid-19, which swiftly led to cancellation of the exam at the end of March. Since then Examination Group meetings were conducted virtually and an early decision was made to deliver all components of the ECMGG online in collaboration with a commercial provider. In the October 2020 elections for the new Bureau of the Section, Jonathan Berg was elected as Head of the Examination Group. Plans are well advanced to deliver the 2021 ECMGG in June (MCQs), and September (SOAs) for those who pass the MCQ paper.